

**هيئة التقييس لدول مجلس التعاون لدول الخليج العربية**  
**GCC STANDARDIZATION ORGANIZATION (GSO)**

Final Draft

**GSO 05/FDS ----/2011**

**المشروبات الاصطناعية المنكهة**  
**Flavored artificial drinks**

Prepared by  
Gulf Technical committee of food and agriculture products

**This document is a draft Gulf Standard circulated for comment. It is, therefore subject to change and may not be referred to as a Gulf Standard until approved by The Board of Directors.**

**ICS: 67.160.20**

**Flavored artificial drinks**

**Date of GSO Board of Directors' Approval :**  
**Issuing Status :**

**Foreword**

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No (5) "Technical committee for standards of food and agriculture products" has updated the GSO Standard No. : GSO .... /.... "FLAVORED ARTIFICIAL DRINKS" The Draft Standard has been prepared by Sultanate Of Oman .

This standard has been approved as a Gulf Technical regulation by GSO Board of Directors in its meeting No. (), held on ..... ,

**FLAVORED ARTIFICIAL DRINKS****1- SCOPE AND FIELD OF APPLICATION**

This standard is concerned with flavored artificial drinks which are non carbonated.

**2- COMPLEMENTARY REFERENCES**

- 2.1 GSO 1 “Labeling of Prepackaged Foods”.
- 2.2 GSO 150 “Expiration Periods of Food Products - Part 1”.
- 2.3 GSO 21 “Hygienic Regulations for Food Plants and Their Personnel”.
- 2.4 GSO 22 " methods of test for coloring matter used in Foodstuff".
- 2.5 GSO 20 “Methods for the Determination of Contaminating Metallic Elements in Foodstuffs”.
- 2.6 GSO 149 “Un bottled Drinking Water”.
- 2.7 GSO ISO 2448 :2007 “Fruit and Vegetable Products - Determination of Ethanol”.
- 2.8 GSO 707 " Flavorings Permitted For Use in Foodstuffs"
- 2.9 GSO 840 " Determination of sweeteners permitted for use in food products-Part1
- 2.10 GSO 244 “Methods of Test for Vegetables, Fruits and Their Products - Part 1: Organoleptic Examination, Determination of Net Weight and Drained Weight, Determination of Apparent Viscosity, Determination of Head-Space, Determination of Extraneous Matter and Defective Fruits”.
- 2.11 Codex Standard No.192 for "Food Additives" which adopted by GSO.
- 2.12 GSO 1016 " Microbiological Criteria for Foodstuffs-Part1.

**3- DEFINITIONS**

**Artificial Drink with Fruit Flavor:** Drink prepared from the water and sugar and add one or more of artificial flavorings or similar to natural and additives mentioned in the items (4.4) , (4.5) to give a drink similar to the natural juice

**4- REQUIREMENTS**

- 4.1 The following requirements shall be met in artificial drink with fruit flavor:
  - 4.1.1 Be free of impurities and separation.
  - 4.1.2 All raw materials used shall comply with the relevant Gulf standards.
  - 4.1.3 The product shall be prepared according to hygienic conditions stated in the Gulf standard mentioned in ( 2.3).
- 4.2 The water used in the dilution of the concentrated juice shall be potable and complying with the Gulf standard mentioned in (2.6)
- 4.3 It shall have the characteristic color and flavor of the product.

- 4.4 Optional materials
  - 4.4.1 Natural sugars: Sucrose, corn syrup, dextrose, honey, invert sugars...,etc.
  - 4.4.2 Artificial sweeteners: Artificial sweeteners permitted for use shall comply with the GSO standard mentioned in (2.11)
  - 4.4.3 It is allowed to use fruit juice or concentrated fruit juice as a flavoring agent by less than 10%.
  - 4.4.4 Vitamins & Minerals: May use vitamins and minerals that are soluble in aqueous medium with added concentration less than 15% of the daily requirement of the individual, according to WHO recommendations.
- 4.5 Food Additives:

Only allows the use of food additives in codex standard mentioned in item No. (2.11) with the rates mentioned in table No.( 2 ) in the category of food and additives mentioned in table No.( 3 )according to the good manufacturing products.
- 4.6 The contaminating mineral elements shall not exceed the following:

|         |         |
|---------|---------|
| Arsenic | 0.1 ppm |
| Lead    | 0.2 ppm |
- 4.7 Microbiological criteria in the product shall not exceed what is stated in the Gulf standard mentioned in (2.12)

## **5- SAMPLING**

Samples shall be taken according to the Gulf standard GSO 1000 " Method of Sampling for Prepackaged Food Products"

## **6- METHODS OF TEST**

- 6.1 Tests shall be carried out according to the following GSO standards and may refer to other international standards or methods of the corresponding incoming reference formal:
  - 6.1.1 Impurities:

Detection of impurities shall be carried out according to the GSO standard mentioned in (2.10).
  - 6.1.2 Determination of Ethanol:

Determination of ethanol shall be carried out according to the method specified in the Gulf standard mentioned in (2.7)
  - 6.1.3 Artificial sweeteners:

Detection of artificial sweeteners shall be carried out according to the GSO standard mentioned in (2.9.)
  - 6.1.4 Coloring matter  
Detection of coloring matter shall be carried out according to the GSO standard mentioned in (2.4)

- 6.1.5 Contaminating mineral elements:  
Contaminating mineral elements shall be determined according to the GSO standard mentioned in (2.5).
- 6.2 Tests  
All required tests shall be carried out on the representative sample, taken according to item (5), to determine its compliance with all the items of this standard.

**7- LABELLING**

Without prejudice to what is stated in the Gulf standards mentioned in (2.1) and (2.2), the following information shall be declared on the labeling :

- 7.1 The term "Flavored Artificial Drink" with the type of flavor used.
- 7.2 Type of drink, sweetened or not sweetened or with artificial sweeteners.
- 7.3 Amount and type of vitamins and minerals in case of enriching the powder with them.
- 7.4 Nutritional data (the amount of energy in calories, the number of grams of protein, fat, carbohydrates, sugar, vitamins and minerals added) / 100 ml or the package size if was less than that

**8- PACKAGING, TRANSPORTATION AND STORAGE**

- 8.1 Packaging
- 8.1.1 The product shall be packaged in clean, hygienic, suitable, hermetically sealed and moisture proof containers.
- 8.1.2 Packaging should be are free from any pictures or an image specify the type of fruit
- 8.2 Transportation  
Transportation shall be carried out in such a way as to protect the product from mechanical damage and contamination.
- 8.3 Storage  
The product shall be stored in well-ventilated stores far away from sources of heat, moisture and contamination